possible to report threats directly to commanders with unparalleled speed. By the end of World War II, B-29s were flying above 30,000 ft. and powerful cameras were providing detailed, wide field of view battlefield reconnaissance and weather information crucial to Allied commanders.

In 1955, with the Cold War entering a deep freeze and with the emerging Soviet ICBM program posing a threat to national security, the U.S. Air Force seized the high ground advantage with the introduction of the U-2 spy plane.

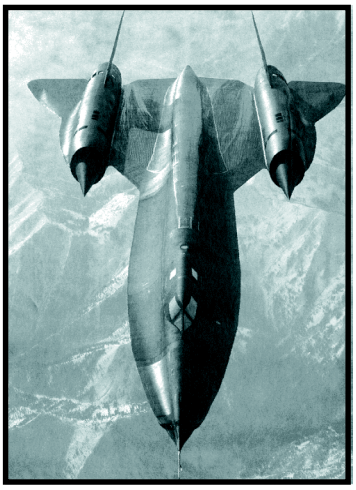
The U-2 was designed to collect intelligence data on enemy forces while flying at altitudes greater than 70,000 ft. It was the first to spot the Soviet missile buildup in Cuba, which led to the naval blockade of the Communist island nation in 1962. This valuable early warning of threatening missiles 90 miles off the coast of Florida was crucial to providing the U.S. flexibility of actions that would not have been possible without control of the high ground.

The U-2 took to the high ground in 1955.

U-2's had one drawback — they were relatively slow and unable to evade improved surface-to-air missiles being produced by the Soviet Union. In 1960, Francis Gary Powers' U-2 was shot down over Soviet airspace, and diplomatic pressure caused President Eisenhower to terminate all aerial reconnaissance missions over the Soviet Union.

America needed a new high ground sentry to provide early warning and intelligence to national leaders and military commanders. Initiated in 1958, the "Corona" program was the first space photo reconnaissance satellite. This system used photographic film to take high resolution pictures from space and would then "de-orbit" a film canister to be recovered in midair by a C-119 aircraft. The first successful recovery of a Corona capsule occurred on 18 August 1960.

The SR-71 "Blackbird" was introduced in 1966 and was capable of flying at over three times the speed of sound; however, space was quickly becoming the preferred venue for early warning.



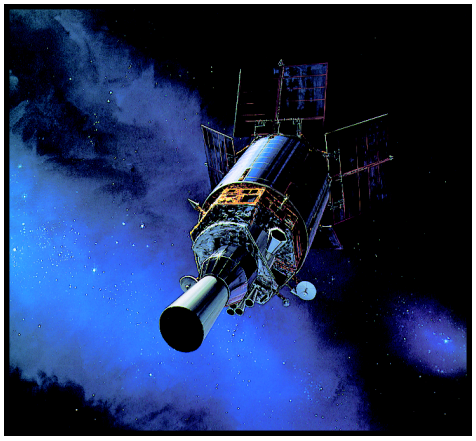
The SR-71 added speed to the U.S. spy business; however, space soon became the preferred venue for early warning.

In 1966, the U.S. Air Force started development of a missile warning satellite system now known as the Defense Support Program (DSP). Orbiting at 35,862 km (22,275 miles) in geostationary orbit, these satellites use infrared detectors to scan the earth's surface for the hot exhaust plume of ballistic missile launches.

DSP has been the mainstay of U.S. early warning since 1970; however, with the primary threats shifting from large scale ICBM attacks to theater based conflicts, America's early warning system requires change.

The answer:

Space Based Infrared System — SBIRS.



Standing watch for over 25 years, DSP has been the mainstay of U.S. early warning since 1970.